

Title (en)
AIR CONDITIONING DEVICE

Title (de)
KLIMATISIERUNGSVORRICHTUNG

Title (fr)
DISPOSITIF DE CLIMATISATION

Publication
EP 3693197 B1 20240619 (EN)

Application
EP 18863956 A 20180914

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Abstract (en)
[origin: EP3693197A1] An air-conditioning device (100) includes: a compressor (21); an outdoor heat exchanger (23); an evaporating unit (25) configured to evaporate refrigerant by causing the refrigerant to absorb heat of air to be guided to a vehicle cabin of a vehicle; a heater unit (42) configured to heat the air to be guided to the vehicle cabin by using the heat of the refrigerant compressed by the compressor; a liquid receiver (24) arranged at the downstream side of the outdoor heat exchanger (23), the liquid receiver (24) being configured to separate the refrigerant guided from the outdoor heat exchanger (23) into a liquid-phase refrigerant and a gaseous-phase refrigerant and to store the liquid-phase refrigerant; and a restrictor mechanism (27) provided between the heater unit (42) and the outdoor heat exchanger (23), the restrictor mechanism (27) being configured to cause the refrigerant to be decompressed and expanded, wherein, in an operation state in which the flow of the refrigerant is restricted by the restrictor mechanism (27) and heat is released in the heater unit (42), a first operation mode and a second operation mode are switched, the first operation mode being set such that the liquid-phase refrigerant is stored in the liquid receiver (24) and the gaseous-phase refrigerant is guided to the compressor (21) and the second operation mode being set such that the liquid-phase refrigerant stored in the liquid receiver (24) is guided to the evaporating unit (25).

IPC 8 full level
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CPC (source: EP US)
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